BRUHAT BENGALURU MAHANAGARA PALIKE

YELAHANKA ZONE

NAME OF WORK : IMPROVEMENTS OF ROADS AND DRAINS AT SUSHEELAMMA LAYOUT IN WARD NO.02 OF YELAHANKA SUB-DIVISION

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Estimate Cost Rs. 25.00 Lakhs Rate	Amount
1	**Removing B.S. slab** of Drain and stacking.(P No.25 / I N 5.32)								
	for Drain	Sqm							
	Susheelamma Layout Main Road		1	265.00	0.90		238.50		
			1	235.00	0.90		211.50		
	Deduct cross roads		-7	6.00	0.90		-37.80		
							412.20	65.72	27089.78
	Basic Rate	62.00							
	Area Weightage @ 6%	3.72							
	Total	**65.72**							
2	KSRRB 300 - Excavation for road, drains and similar works - KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH Chapter 3 (P.142/I.19.1)								
	Desilting for Drain	Cum							
	Susheelamma Layout Main Road		2	265.00	0.60	0.60	190.80		
							190.80	86.92	16584.34
	Basic Rate	82.00							
	Area Weightage @ 6%	4.92							
	Total	**86.92**							
3	**Refixing stone slabs** of drains and pointing in C.M.(1:3)(P.No.25/I.No.5.33)								
		Sqm							
			80% of Qty Vide Item No.1				**329.76**	80.56	26565.47
	Basic Rate	76.00							
	Area Weightage @ 6%	4.56							
	Total	**80.56**							
4	KSRB 2-1.1 : Earthwork in surface excavation in ordinary soil for levelling and lowering the ground manually (other than foundation of buildings, culverts, road drains and trenches of pipe lines and cables) and removing the excavated stuff to a distance not exceeding 50m and lift upto 1.5m, excavated surface leveled and neatly dressed, disposed earth to be leveled after breaking of clods and neatly dressed as per specifications. specification. No. KBS 2.1 (a) / 2.3.1 (P.5/I.2.1)								
	Road Cut Portions	Cum							
	Susheelamma Layout		1	265.00	1.65	0.40	174.90		
	7th Cross Road		1	70.00	1.50	0.40	42.00		
	6th Cross Road		1	40.00	1.40	0.40	22.40		
	5th Cross Road		1	30.00	1.20	0.40	14.40		
	4th Cross Road		1	40.00	1.20	0.40	19.20		
	Cross Cuttings		45	6.00	0.60	0.40	64.80		
	berm cutting		2	80.00	0.90	0.30	43.20		
							380.90	166.42	63389.38
	Basic Rate	157.00							

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
	Area Weightage @ 6%	9.42							
	Total	**166.42**							
5	KSRRB M100-1 Loading and Unloading of Stone Boulder / Stone aggregate /sand/kaner/ Moorum KSRRB M100-1 Placing tipper at loading point, loading with front end loader, dumping, turning for return trip, excluding time for haulage and return trip complete as per specifications MORTH -100/ Chapter 1 (Page No.133/ Item No 17.1)								
		Cum							
			Qty Vide Item No.2+4				**571.70**	100.00	**57170.00**
	Average Weight of Earth 1.28 Tonne/Km								
	Basic Rate Lead Charges for 10.00 Kms (2.50X1.28X10.00)	32.00							
	Add loading and unloading Item No 17.1)	68.00							
	Total	**100.00**							
6	Providing granite slabs of selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc., complete 7.5 cms thick (Page No.25, Item No. 5.31.1)								
		Sqm							
			1	30.00	1.50		45.00		
							45.00	665.68	**29955.60**
	Basic Rate	628.00							
	Area Weightage @ 6%	37.68							
	Total	**665.68**							
7	Providing and fixing **RCC precast Slabs of 0.10 m thick of CC 1:2:4 with 20 mm** and down size graded granite metal , machine mixed , including cost of all material , labour , HOM of Machinery , curing complete								
		Sqm							
			20% of Qty Vide Item No.1				82.44		
							82.44	2100.00	**173124.00**
	Data Rate	**2100.00**							
8	KSRB 5-11 : Providing and constructing load bearing wall with cement concrete cavities blocks (hollow blocks) of proportion 1:1.5:3 blocks of size 40x20x20cms.(lxbxh) strength not less than 3.5 Newton per sqmm with cement mortar 1:4 conforming to I.S.2185 of 1967 having not less than 40mm shell thickness with two or more large cavities and having solid material between including cost of materials, labour charges, scaffoldings, curing complete as per specifications. KBS No.5.4 (P.24 / I.N 5.25)								
	for Drain	Sqm							
			2	30.00		0.40	24.00		
							24.00	974.14	**23379.36**
	Basic Rate	919.00							
	Area Weightage @ 6%	55.14							
	Total	**974.14**							
9	KSRB 4-1.7 : Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs with 20mm and down size graded granite metal coarse aggregate @ 0.84cum and fine aggregate @ 0.56 cum machine mixed concrete laid in layers not exceeding 15cms, thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications, specification. No. KBS 4.1,4.2 (P No. 13 / Item No.4.7)								
		Cum							
	for Drain, coping		2	30.00	0.20	0.10	1.20		

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
	packing concrete		1	65.00	0.20	0.10	1.30		
							2.50	**5598.92**	**13997.30**
	Basic Rate	5282.00							
	Area Weightage @ 6%	316.92							
	Total	**5598.92**							
10	5.29(b)Providing and fixing **pre cast solid cement concrete kerb stones** made out of No.272.21 C.C 1:2:4 with top and bottom width 114 and 165mm repectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including formwork curing, including, cost of all materials, labour hire charges of machinery, loading unloading, lead and lift, transportation etc, complete (P.No.25 /It.No.5.30)								
		No							
			1	30.00		30.00 / 0.45	66.67		
			70				70.00		
							136.67		
						Say	**136.00**	**331.78**	**45122.08**
	Basic Rate	313.00							
	Area Weightage @ 6%	18.78							
	Total	**331.78**							
11	**Cleaning the existing black topped surface** with brooms, soft brushes and finally dusting with old gunny bags and /or compressed air to recieve bituminous treatment including cost of all materials, labour, HOM of machineries complete as per Specifications. (P.No 157 & I.No.21.2)								
		Sqm							
	Susheelamma Layout		1	265.00	6.00		1590.00		
	7th Cross Road		1	70.00	5.00		350.00		
	6th Cross Road		1	40.00	5.00		200.00		
	5th Cross Road		1	30.00	5.00		150.00		
	4th Cross Road		1	40.00	5.00		200.00		
				Deduct Road cut portions			-796.50		
							1693.50	**3.18**	**5385.33**
	Basic Rate	3.00							
	Area Weightage @ 6%	0.18							
	Total	**3.18**							
12	KSRRB M400-6.1. Construction of granular sub-base by providing close graded material, mixing in a mechaical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications. A. Plant Mix Method.Close graded granular sub-base material as per 400-1 For Grading- II Material (P.No.155 It.No.20.4.2)								
	Road Cut Portions	Cum							
	Susheelamma Layout		1	265.00	1.65	0.15	65.59		
	7th Cross Road		1	70.00	1.50	0.15	15.75		
	6th Cross Road		1	40.00	1.40	0.15	8.40		
	5th Cross Road		1	30.00	1.20	0.15	5.40		

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
	4th Cross Road		1	40.00	1.20	0.15	7.20		
	Cross Cuttings		45	6.00	0.60	0.15	24.30		
	Potholes		12	1.20	1.20	0.15	2.59		
			16	1.50	1.20	0.15	4.32		
			25	1.00	1.00	0.15	3.75		
							137.30	1665.26	**228639.37**
	Basic Rate	1571.00							
	Area Weightage @ 6%	94.26							
	Total	**1665.26**							
13	KSRRB M400- Wet Mix Macadam - KSRRB M400-17. Providing, laying, spreading and compacting graded stones aggregate to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 (P.No.158 I.No 20.18)								
	Road Cut Portions	Cum							
	Susheelamma Layout		1	265.00	1.65	0.225	98.38		
	7th Cross Road		1	70.00	1.50	0.225	23.63		
	6th Cross Road		1	40.00	1.40	0.225	12.60		
	5th Cross Road		1	30.00	1.20	0.225	8.10		
	4th Cross Road		1	40.00	1.20	0.225	10.80		
	Cross Cuttings		45	6.00	0.60	0.225	36.45		
	Potholes		12	1.20	1.20	0.15	2.59		
			16	1.50	1.20	0.15	4.32		
			25	1.00	1.00	0.15	3.75		
							200.62	1768.08	**354709.12**
	Basic Rate	1668.00							
	Area Weightage @ 6%	100.08							
	Total	**1768.08**							
14	Providing and applying primer coat with ss bitumen emulsion on prepared surface of granular base such as WMM including clearing of road surface and spraying primer at the rate of 0.60 kg/sqm using mechanical means complete as per specifications. MORTH Specification No.502 (P.No.160/It No.21.6)								
	Road Cut Portions	Cum							
	Susheelamma Layout		1	265.00	1.65		437.25		
	7th Cross Road		1	70.00	1.50		105.00		
	6th Cross Road		1	40.00	1.40		56.00		
	5th Cross Road		1	30.00	1.20		36.00		
	4th Cross Road		1	40.00	1.20		48.00		
	Cross Cuttings		45	6.00	0.60		162.00		
			12	1.20	1.20		17.28		
			16	1.50	1.20		28.80		
			25	1.00	1.00		25.00		

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
							915.33	27.56	25226.49
	Basic Rate	26.00							
	Area Weightage @ 6%	1.56							
	Total	27.56							
15	KSRRB M500- 15. Providing, laying dense graded bituminous macadam using 40/60 TPH capacity H.M.P with Mechanical paver Gr-II (50mm to 75mm), crushed aggregates of specified grading premixed with 4.5% VG 30 grade bituminous binder and , transporting the hot mix to work site , laying to the required level and grade, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications MORTH Specification No.507 (P.No.162&163 It.No.21.17.6)								
		Cum							
	Susheelamma Layout		1	265.00	1.65	0.050	21.86		
	7th Cross Road		1	70.00	1.50	0.050	5.25		
	6th Cross Road		1	40.00	1.40	0.050	2.80		
	5th Cross Road		1	30.00	1.20	0.050	1.80		
	4th Cross Road		1	40.00	1.20	0.050	2.40		
	Cross Cuttings		45	6.00	0.60	0.050	8.10		
			12	1.20	1.20	0.050	0.86		
			16	1.50	1.20	0.050	1.44		
			25	1.00	1.00	0.050	1.25		
	profile correction	15% of Qty Vide Item No.11			254.03	0.050	12.70		
							58.47	6435.26	376255.17
	Basic Rate	6071.00							
	Area Weightage @ 6%	364.26							
	Total	6435.26							
16	KSRRB 500-7:Providing and applying tack coat with bitumen emulsion using 80/100 grade bitumen (VG20) on the prepared black toped suface at 2.5kg per 10 sqm, heating bitumen in boiler fitted with spray set (Excluding cleaning of road surface) including cost of all materials, labour, HOM of Machineries complete as per Specifications.(P.No.160 & I.No.21.7)								
		Sqm							
	Susheelamma Layout		1	265.00	6.00		1590.00		
	7th Cross Road		1	70.00	5.00		350.00		
	6th Cross Road		1	40.00	5.00		200.00		
	5th Cross Road		1	30.00	5.00		150.00		
	4th Cross Road		1	40.00	5.00		200.00		
							2490.00	14.84	36951.60
	Basic Rate	14.00							
	Area Weightage @ 6%	0.84							
	Total	14.84							

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
17	KSRRB M500- 15. Providing, laying bituminousConcrete using 40/60 THP capacity H.M.P with Mechanical paver Gr-II (30mm to 45mm), crushed aggregates of specified grading premixed with 6% VG 30 grade bituminous binder and , transporting the hot mix to work site , laying to the required level and grade,rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH Specification clause No.500.9 complete in all respects complete as per specifications MORTH Specification No.509 (P.No.164 Item No.21.22.6)								
		Cum							
	Susheelamma Layout		1	265.00	6.00	0.040	63.60		
	7th Cross Road		1	70.00	5.00	0.040	14.00		
	6th Cross Road		1	40.00	5.00	0.040	8.00		
	5th Cross Road		1	30.00	5.00	0.040	6.00		
	4th Cross Road		1	40.00	5.00	0.040	8.00		
							99.60	7270.54	**724145.78**
	Basic Rate	6859.00							
	Area Weightage @ 6%	411.54							
	Total	**7270.54**							
18	KSRRB M800-13: Road marking with hot applied thermoplastic compound with reflect rising glass beads on bituminous surface- providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface to level, uniform and free from streaks and holes complete as per specifications. MORTH specification No. 803, No. 1974 (P.No.181 & I.No.24.15)								
		Sqm							
			2.5	265	0.10		66.25		
			2	180	0.10		36.00		
							102.25	464.28	**47472.63**
	Basic Rate	438.00							
	Area Weightage @ 6%	26.28							
	Total	**464.28**							
19	KSRB 15-19.2 :Providing and applying **ready mix priming coat** over concrete/masonry/asbestos cement sheet/plastered surfaces including preparing the surface after throughly cleaning of oil,grease,dirt and other foreign matter and sand papering including cost of materials, labour, complete as per specifications. (Page no.121 / It no.15.80)								
		Sqm							
			2	265.00		0.40	212.00		
			-7	6.00		0.40	-16.80		
							195.20	27.56	**5379.71**
	Basic Rate	26.00							
	Area Weightage @ 6%	1.56							
	Total	**27.56**							
20	KSRB 800-1 Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. (Page No.182 & Item No.24.1)								

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
		Sqm							
			Qty Vide Item No.19				195.20	63.60	12414.72
	Basic Rate	60.00							
	Area Weightage @ 6%	3.60							
	Total	63.60							
					Sub-Total Amount				2292957.23
21	9% for KRIDL Charges								206366.15
22	Miscellaneous and unforeseen charges	LS							676.62
					Grand Total Amount				2500000.00
	(Rupees Twenty Five Lakhs Only)								

CERTIFICATE

1) The site has been inspected and the work is found to be necessary.
2 The rates adopted are as per PW,P IWTD SR of 2016-17 and data rate of Bangalore Circle.
3) The provisions were made in this estimate are necessary and adequate.
4) The area comes under the Bruhat Bengaluru Mahanagara Palike Limits.

Assistant Engineer
Ward No.02

Assistant Executive Engineer
Yelahanka Sub-Division
B.B.M.P

Executive Engineer
Yelahanka Division
B.B.M.P

Administrative Approval
Accorded For 25.00 lakh Rs.
Head of A/C P.3111
CER NO :147 Dt:12 01 17

TA CE (YNK)

Technical Sanction
Accorded For 25.00 lakh Rs
Head of A/C P.3111
CER NO :120 Dt:12 01 17

TA CE (YNK)

OF WORK : IMPROVEMENTS OF ROADS AND DRAINS AT SUSHEELAMMA LAYOUT IN WARD NO.02 OF YELAHANKA SUB-DIVISION

KEY : NOT TO SCALE

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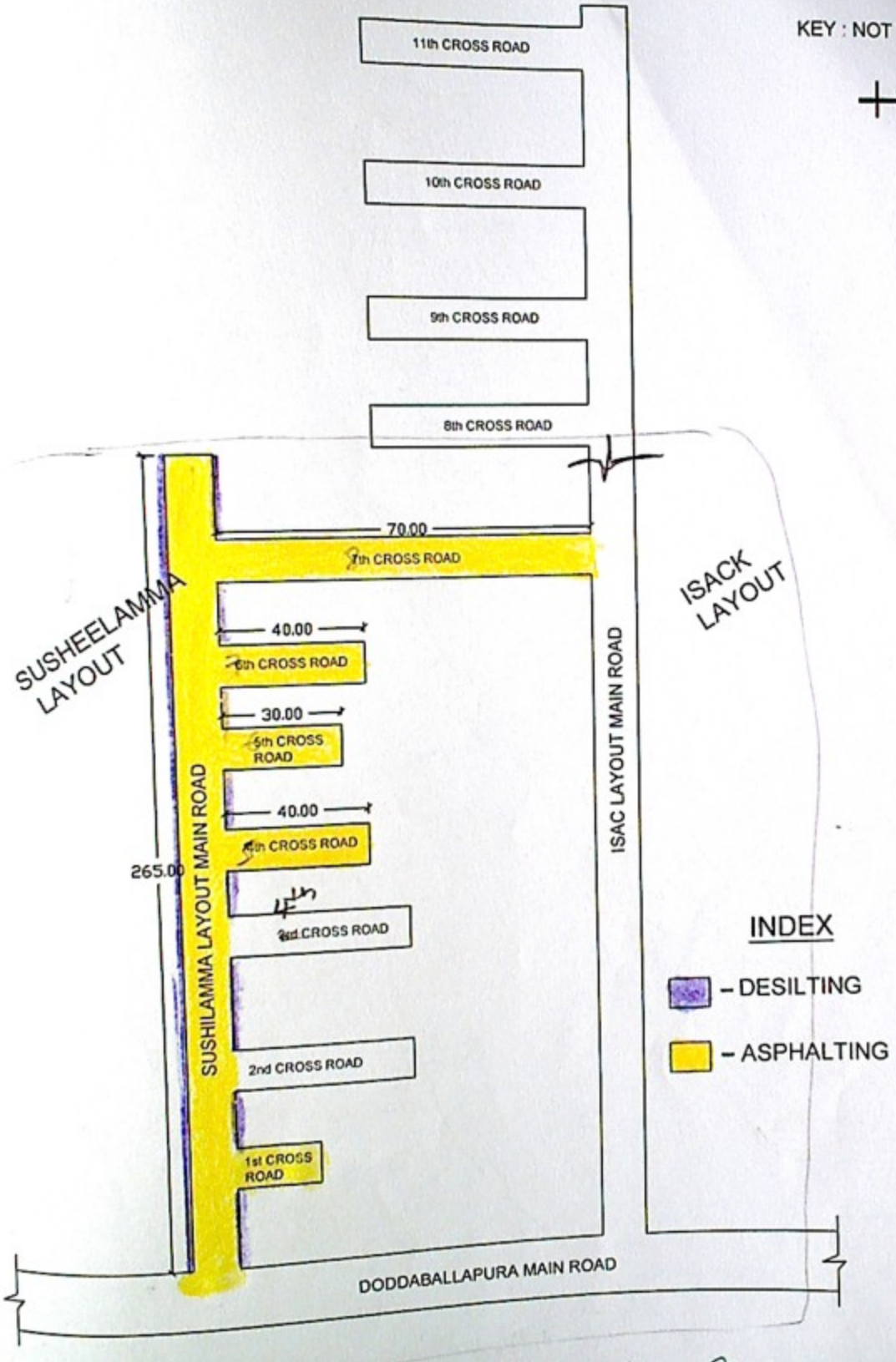

Assistant Engineer
Ward No.02
B.B.M.P

Assistant Executive Engineer
Yelahanka Sub-Division
B.B.M.P